Thailand

This report provides a series of summary charts, statistics and other details about the mobilization and use of open-access species data through the GBIF network, relating to users and participating institutions in Thailand. These metrics show status at the time of report generation, unless otherwise noted. Taken together, the elements of this report can help guide and measure progress toward the information needs for biodiversity research, as well as for national commitments on biodiversity and sustainable development.

▶ Access and usage

Researchers from Thailand contributed to 14 peer-reviewed articles citing GBIF use during 2023 and a total of 56 articles since 2008.

▶ Data availability in Thailand

- **Animalia**: 4,519,816 occurrences
- **Plantae**: 292,789 occurrences
- **Fungi**: 100,057 occurrences
- **Unknown**: 11,928 occurrences
- **Protozoa**: 4,552 occurrences
- **Bacteria**: 35,737 occurrences
- **Virus**: 9,303 occurrences
- **Chromista**: 17,511 occurrences
- **Archaea**: 573 occurrences

▶ Data mobilization

Institutions from Thailand published 849,961 new occurrence records during 2023 out of a total of 355,993,458 occurrence records added globally to GBIF.org.

*Number of records published by institutions in Thailand, categorized by kingdom*
Access and usage

Data downloads on GBIF.org from users in Thailand

Recent peer-reviewed articles using GBIF-mediated data by co-authors based in Thailand

The GBIF Secretariat maintains and reports on an ongoing literature tracking programme, giving priority to substantive uses of GBIF-mediated data in peer-reviewed literature while identifying the countries or areas of the authors’ institutional affiliations. The citations below represent the five most recent journal articles with at least one co-author from Thailand.

Those interested in assisting the Secretariat in identifying additional peer-reviewed uses of GBIF-mediated data may forward relevant citations to comms@gbif.org.

Mehrotra, McGrath, McCabe et al. (2023) A cup half full: the first assessment on the distribution, ecology and need for conservation of the threatened Neptune’s cup sponge, Cliona patera, in the Gulf of Thailand. *Environmental Monitoring and Assessment.*
https://doi.org/10.1007/s10661-023-12037-4

Kidyoo, Kidyoo, McKey et al. (2023) Molecular phylogeny of Vincetoxicum (Apocynaceae, Asclepiadoideae) from Thailand and integrative taxonomy corroborating a new cryptic species within Vincetoxicum kerrii. *Journal of Plant Research.*
https://doi.org/10.1007/s10265-023-01501-4

Trisurat, Sutummawong, Roehrdanz et al. (2023) Climate Change Impacts on Species Composition and Floristic Regions in Thailand. *Diversity.*
https://doi.org/10.3390/d15101087

Thongsangtum, Huang, Li et al. (2023) Calophyllum (Calophyllaceae) from late Oligocene–Early Miocene of Li Basin, northern Thailand and its biogeographic and paleoclimatic implications. *Palaeoworld.*

Data availability

Total data available for selected taxonomic groups in Thailand

- **Mammals**: 26,183 occurrences
- **Birds**: 3,884,753 occurrences
- **Bony fish**: 63,247 occurrences
- **Amphibians**: 27,037 occurrences
- **Insects**: 384,070 occurrences
- **Reptiles**: 39,552 occurrences
- **Molluscs**: 43,779 occurrences
- **Arachnids**: 13,950 occurrences
- **Flowering plants**: 255,977 occurrences
- **Ferns**: 16,506 occurrences
- **Gymnosperms**: 1,270 occurrences
- **Mosses**: 11,229 occurrences
- **Sac fungi**: 53,832 occurrences
- **Basidiomycota**: 36,848 occurrences

**Mammals = Class Mammalia**
**Birds = Class Aves**
**Bony fish = Superclass Osteichthyes p.p.**
**Amphibians = Class Amphibia**

**Insects = Class Insecta**
**Reptiles = Class Testudines, Sphenodontia, Squamata & Crocodylia**
**Molluscs = Phylum Mollusca**

**Arachnids = Class Arachnida**
**Flowering plants = Phylum Magnoliophyta**
**Gymnosperms = Superclass Gymnospermae**

**Mosses = Phylum Bryophyta**
**Sac fungi = Phylum Ascomycota**
**Basidiomycota = Phylum Basidiomycota**

### Change over time in records about biodiversity in Thailand

#### Species occurrence records accessible through GBIF over time

![Graph showing species occurrence records accessible through GBIF over time in Thailand](image)

**Occurrence records available about species occurring in Thailand**

#### Number of species having occurrence records accessible through GBIF over time

![Graph showing number of species having occurrence records accessible through GBIF over time in Thailand](image)

**Species for which at least one occurrence record is available in Thailand**

**WHY MIGHT THE AMOUNT OF MOBILIZED DATA DECREASE?**

Datasets are sometimes removed by publishers, but more often decreases in the number of records are due to the removal of duplicate records and datasets.

**SPECIES COUNTS** represent the number of binomial scientific names for which GBIF has received data records, organized as far as possible using synonyms recorded in key databases like the Catalogue of Life.
Most recent datasets from publishers in Thailand

Mosquitoes (Diptera: Culicidae) Distribution in Thailand. *Published by Walailak University, School of Allied Health Sciences*
https://doi.org/10.15468/tbd7fz

Lancang-Mekong microbiome project 16S rRNA metabarcode (March - December 2021). *Published by Thailand Bioresource Research Center (TBRC)*
https://doi.org/10.15468/8bfgcdv

Lancang-Mekong microbiome project sampling (March - December 2021). *Published by Thailand Bioresource Research Center (TBRC)*
https://doi.org/10.15468/drf547

Database and digitization of bees from TIGER project (Thailand). *Published by Chulalongkorn University, Department of Biology*
https://doi.org/10.15468/p6zfzc

Database and digitization of bees in Thailand. *Published by Chulalongkorn University, Department of Biology*
https://doi.org/10.15468/tf4ejd

PSU-Seaweed Collection. *Published by Princess Maha Chakri Sirindhorn Natural History Museum (PSU Museum, Prince of Songkla University, Thailand)*
https://doi.org/10.15468/drm8gy

See all datasets from this country or area: gbif.org/dataset/search?publishing_country=TH

Newest publishers from Thailand

Walailak University, School of Allied Health Sciences
Thailand Bioresource Research Center (TBRC)
Chulalongkorn University, Department of Biology
Princess Maha Chakri Sirindhorn Natural History Museum (PSU Museum, Prince of Songkla University, Thailand)

Occurrence records downloaded from GBIF.org, published by institutions in Thailand

Number of occurrence records downloaded via GBIF.org published by institutions in Thailand

See all publishers from this country or area gbif.org/publisher/search?country=TH
Data mobilization

Data sharing with country or area of origin by national institutions in Thailand

The chart above shows the number of records shared over time by publishers within Thailand, with separate colours for records about species occurring within undefined and those occurring elsewhere.

### Top data contributors about biodiversity in Thailand

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country or area</th>
<th>No. of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thailand</td>
<td>3,785,145</td>
</tr>
<tr>
<td>2</td>
<td>United States of America</td>
<td>406,447</td>
</tr>
<tr>
<td>3</td>
<td>Netherlands</td>
<td>163,164</td>
</tr>
<tr>
<td>4</td>
<td>United Kingdom</td>
<td>155,182</td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>139,279</td>
</tr>
<tr>
<td>6</td>
<td>Estonia</td>
<td>89,904</td>
</tr>
<tr>
<td>7</td>
<td>International organization or unknown country</td>
<td>55,352</td>
</tr>
<tr>
<td>8</td>
<td>Finland</td>
<td>49,182</td>
</tr>
<tr>
<td>9</td>
<td>Denmark</td>
<td>23,517</td>
</tr>
<tr>
<td>10</td>
<td>Germany</td>
<td>21,068</td>
</tr>
</tbody>
</table>

Table 1. Ranking of countries or areas contributing data about Thailand

### Top datasets contributing data about Thailand

- EOD – eBird Observation Dataset. *3,742,254 occurrences in Thailand.* (Last updated 20 Aug 2023)
- Naturalis Biodiversity Center (NL) - Botany. *107,462 occurrences in Thailand.* (Last updated 12 Dec 2023)
- Insect species recorded in sugarcane fields of Khon Kaen Province, Thailand, over three seasons in 2012. *98,423 occurrences in Thailand.* (Last updated 15 Jun 2022)
- Global soil organisms. *76,803 occurrences in Thailand.* (Last updated 27 Feb 2023)

See all contributing countries and areas or datasets: gbif.org/country/TH/about
Thailand participates in the following projects coordinated by GBIF

Using microbial metabarcoding to monitor biodiversity and bioindicators in the Mekong River
_BIFA: Biodiversity Information Fund for Asia, 2021–2023_
[https://www.gbif.org/project/BIFA6_030](https://www.gbif.org/project/BIFA6_030)

Seeing TIGER for the bees: digitizing apiian specimens from Thailand's national parks
_BIFA: Biodiversity Information Fund for Asia, 2021–2022_
[https://www.gbif.org/project/BIFA6_009](https://www.gbif.org/project/BIFA6_009)

Digitizing and databasing of bee specimens in Thailand
_BIFA: Biodiversity Information Fund for Asia, 2020–2021_
This digitization project will establish a database for bee specimens from Thailand and make open data on these underrepresented families available to researchers worldwide
[https://www.gbif.org/project/1tRUhXbB0fXAxKywxlIR4T](https://www.gbif.org/project/1tRUhXbB0fXAxKywxlIR4T)